What is claimed is:

1. A sensing assembly for use with a tape drive employing a single reel equipped with a takeup leader for interconnecting with a tape cartridge leader connected to a length of tape media located within a tape cartridge, to determine if said tape cartridge leader disconnects from said takeup leader during unloading of said tape cartridge, so that said tape cartridge can be removed from said tape drive without damaging said length of tape media, comprising:

means for disconnecting said takeup leader from said tape cartridge leader prior to removing said tape cartridge from said tape drive; and

at least one leader position detecting means to detect a position of at least one of said tape cartridge leader and said takeup leader following said disconnect, said position being used to determine if said tape cartridge leader disconnects from said takeup leader.

2. The sensing assembly of claim 1 further comprising:

a processing means, responsive to said detected position of said at least one of said takeup leader and said tape cartridge leader, for determining if said tape cartridge leader disconnects from said takeup leader.

3. The sensing assembly of claim 1, wherein said at least one leader position detecting means comprises:

a means for sensing movably located a distance from a tape path;

a means for moving said movable sensing means from an initial position into said tape path to detect said position of at least one of said takeup leader and said tape cartridge leader.

4. The sensing assembly of claim 3, wherein said sensing means is rotatable and comprises:

a means for sensing a rotational position of said rotatable sensing means said rotational position for determining if said tape cartridge leader disconnects from said takeup leader.

5. A test fixture for use testing a tape drive employing a single reel equipped with a takeup leader for interconnecting with a tape cartridge leader connected to a length of tape media located within a tape cartridge, to determine if said tape cartridge leader disconnects from said takeup leader during unloading of said tape cartridge, comprising:

a connecting means for removably connecting said tape drive to said test fixture;

means for disconnecting said takeup leader from said tape cartridge leader for removing said tape cartridge from said tape drive; and

at least one leader position detecting means to detect a position of at least one of said tape cartridge leader and said takeup leader following said disconnect, said position being used to determine if said tape cartridge leader disconnects from said takeup leader.

6. The test fixture of claim 5 further comprising:

a processing means, responsive to said detected position of said at least one of said takeup leader and said tape cartridge leader, for determining if said tape cartridge leader disconnects from said takeup leader.

7. The test fixture of claim 5, wherein said at least one leader position detecting means comprises:

a movable means for sensing insertable into said tape drive a distance from a tape path with said tape drive;

a means for moving said movable sensing means from an initial position into said tape path to detect said position of at least one of said takeup leader and said tape cartridge leader for determining if said tape cartridge leader disconnects from said takeup leader.

8. The sensing assembly of claim 7, wherein said sensing means is rotatable and comprises:

a means for sensing a rotational position of said rotatable sensing means said rotational position for determining if said tape cartridge leader disconnects from said takeup leader.

9. The test fixture of claim 7, wherein said movable sensing means comprises:

a rotatable member extending downward into said tape drive said distance from said tape path; and

a means for sensing connected with said rotatable member for sensing a rotational position of said rotatable member.

10. A sensing assembly for use with a tape drive employing a single reel equipped with a takeup leader for interconnecting with a tape cartridge leader connected to a tape media located within a tape cartridge, to determine if said tape cartridge leader disconnects from said takeup leader during unloading of said tape cartridge from said tape drive, comprising:

a disconnection apparatus for disconnecting said tape cartridge leader from said takeup leader prior to removing said tape cartridge from said tape drive;

a sensing device for sensing a position of said takeup leader following said disconnect; and

a processor responsive to said sensed position of said takeup leader for determining if said tape cartridge leader disconnects from said takeup leader.

11. The sensing assembly of claim 10, wherein said sensing device comprises:

a rotatable sensing ably located a distance from a tape path;

a means for moving said movable sensing means from an initial position into said tape path to detect said position of said takeup leader; and

a means for sensing a rotational position of said rotatable sensing means said rotational position for determining if said tape cartridge leader disconnects from said takeup leader.

12. A method for determining if a tape cartridge leader connected to a length of tape media within a tape cartridge disconnects from a takeup leader within a tape drive employing a single reel during unloading of said tape cartridge, comprising the step of:

(a) executing a disconnection operation to disconnect said tape cartridge leader from said takeup leader;

(b) sensing a position of one of the said tape cartridge leader and said takeup leader following said disconnect operation; and

(c) determining a connection status of said tape cartridge leader from said takeup leader.

13. The method of claim 12, wherein said connection determination step comprises the steps of:

determining a change in position of one of said tape cartridge leader and said takeup leader after said disconnection operation; and

comparing said position change with a threshold to determine if said tape cartridge leader and said takeup leader are disconnected.

14. The method of claim 12, further comprising the step of:

alerting an operator of a disconnection failure in response to a determination that the disconnection failed.

15. The method of claim 12, wherein the position sensing step further comprises the steps of:

positioning a movable sensing assembly a distance from a tape path;

moving said movable sensing assembly into said tape path; and

sensing a position of said movable sensing assembly to determine if said tape cartridge leader successfully disconnected from said takeup leader.